

GEELONG NATURALIST



Vol. 28 No. 2

Spring, 1991

Registered by Australia Post Publication No. VBQ 1814

ISSN 0726-7363

MUSEUM OF VICTORIA



00714

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(Phone: 431826)

GEELONG NATURALIST

JOURNAL OF THE GEELONG FIELD NATURALISTS CLUB INC.

Vol. 28 No. 2
Spring, 1991
ISSN 0726-7363

Publishing Committee

Valda Dedman, 69 North Valley Road, Highton, 3215. (Editor)
Gordon McCarthy, 26 Fairbrae Avenue, Belmont, 3216.
Dave King, 8 Traum Street, Portarlington, 3223.

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G.F.N.C.

P.O. Box 1047, Geelong

Printed by Rowick Printers

Editorial

A museum for Geelong. An impossible dream or an achievable vision? At a recent public meeting a Steering Committee was formed to investigate the viability of such a project, and will report back in six months' time with a prepared detailed proposal. The Geelong Field Naturalists Club is well represented on this committee and the Club's views will be put about the needs for a natural history section in the museum.

I see the Museum as providing a focus for the history of the Geelong district, a repository and exposition of its social, environmental and technological heritage.

At the public meeting we were warned that it takes multi-dollars to do the job properly and that we should not try to copy the Museum of Victoria. But we should not want to. We do not need to become a poor photocopy of Melbourne. The Museum should reflect the uniqueness and richness of Geelong. We do not need to stage yet another display of moving dinosaurs, but we might want to have an exhibition that includes the flying pterosaur of Dinosaur Cove near Cape Otway, along with remains found in the clay quarries at Bacchus, or the fossil bones of Diprodonts from Lake Colongulac. And I can imagine a display about the early field naturalists who walked to Lorne from Bambra for their annual campout, or one about vegetation changes in the Geelong region over the past 150 years. Whatever we do, however, we must do well.

And how wonderful it would be if we could incorporate an environment centre, where we could have access to information about all the flora, fauna and geology of our area, as well as a place of our own for the Club to meet.

A properly managed Museum could give Geelong a sense of identity. Wide community involvement could provide a shot in the arm to a depressed region. We need to make everyone aware of the past achievements of Geelong's citizens and of the richness of its natural environment. A Museum incorporating a Natural History Museum is something this Club should both support and actively work for.

Valda Dedman

Some Observations of Butterflies

by Ray Baverstock

During the past few years Cabbage White Butterflies (*Pieris rapae*) have appeared frequently in our Highton garden. Prior to this they were seldom seen in our area. The caterpillars can wreak havoc in the vegetable garden and I can recall chasing the butterflies with an old tennis racquet when they were sighted in my father's large vegetable patch. (This was an effective way of killing them and also improved ground strikes as well). In those days I lived at Herne Hill and nearly every household had its vegetable garden mainly from necessity. Thus there was plenty of food for the butterflies and their caterpillars and they were much more common there.

Another butterfly which visits our garden is the Common Brown (*Heteronympha merope*). This species is found over a large area of southeastern Australia. This year I have found large numbers at Inverleigh Flora and Fauna Reserve.

During a Field Naturalists Junior Group excursion in November 1990 we were able to observe a large number of Caper White butterflies (*Anaphaeis*) on one of the ridges in heathland behind Anglesea. They appeared to be "hill-topping". Although all aspects of hill-topping are not fully understood, it appears that the males of some species congregate on hill tops and mate with females (usually virgin females) which appear. After mating the females move off.

On 14/11/90 many Caper Whites were seen in our garden along with some Cabbage Whites. It was a hot day with a strong northerly wind blowing. Possibly my powers of observation had been stimulated by the excursion to Anglesea, but I cannot recall having seen so many Caper Whites in our garden before. They seemed to be particularly attracted to the blue stocks which were flowering at the time, but were also seen around other plants as well.

Caper White butterflies frequently undertake immense migratory flights. Although more common in northern states, these flights occur in Victoria, and in November 1985 we witnessed one of them.

We were holidaying at Halls Gap and on an extremely hot day with a north wind we decided to go to Lake Fyans where we could sit at the southern end of the lake and hopefully enjoy a cooler breeze coming off the water.

Just out of Halls Gap as we were travelling on the Pomonal Road we came across huge numbers of Caper Whites flying across the road in a constant stream and moving in a southerly direction. It was rather like driving through a snowstorm of butterflies.

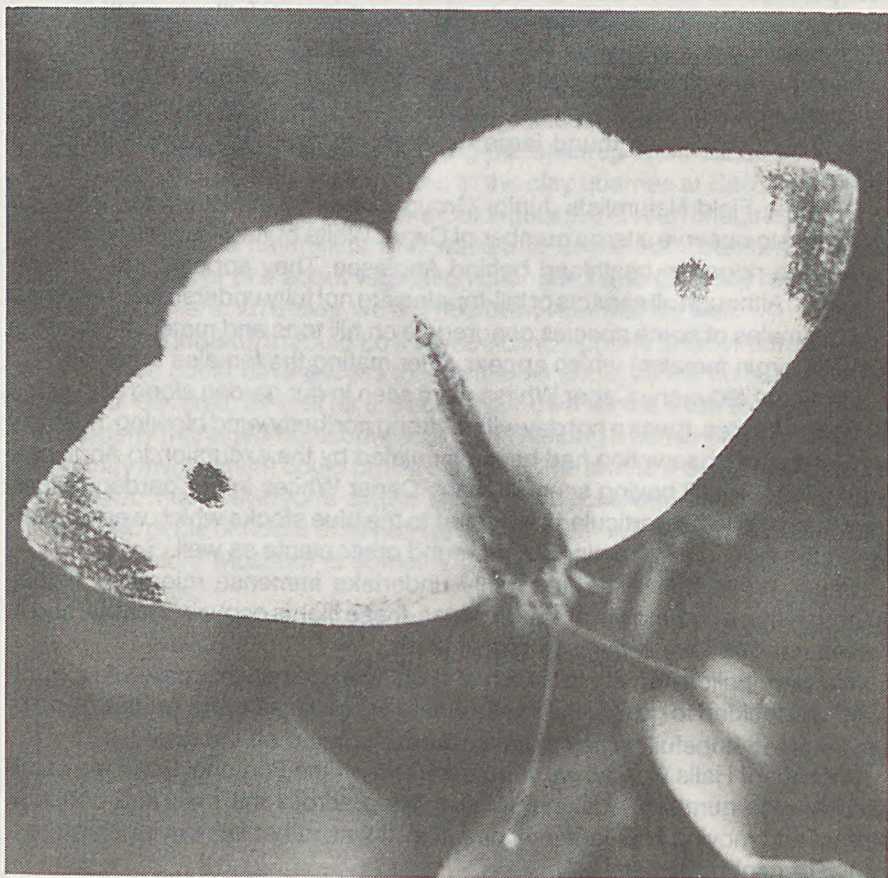
We finally emerged from the migration on the outskirts of Pomonal. The butterflies were spread over a distance of some eight kilometres, so there must have been many millions of them in the flight.

When we returned to Halls Gap later in the day all the butterflies had gone.

Reference

Common I.F.B. and Waterhouse, D.F. *Butterflies of Australia*. Angus & Robertson, 1972.

Ray Baverstock
13 Helena Street,
Highton, 3216.



Cabbage White Butterfly. Photo Trevor Pescott

Dragonflies by Ray Baverstock

Unusually large numbers of dragonflies were seen in the Geelong region during last summer.

On 1st November 1990 there were dozens of them hawking for other insects in our garden, and when we went to the Geelong Regional Library later in the day many hundreds were seen flying around Johnstone Park.

The following day we were at the Inverleigh Flora and Fauna Reserve and large numbers of dragonflies were swarming all over the Reserve.

Tuesday 13th November 1990 was a very hot day with strong northerly winds. Late in the afternoon a cool change arrived, and with it came countless thousands of dragonflies, certainly the most I have ever seen. Half an hour later most of them had moved on.

It would appear that weather conditions had suited them, as during the preceding months there was heavy rain followed by an early spell of warm weather.

In the nymphal stage dragonflies are said to spend from a few months to a few years in fresh or brackish water. The nymphs may moult up to fifteen times before emerging as adult dragonflies. Both nymphs and adults are voracious feeders. Adults always take their prey on the wing. In the later nymphal stages they are known as "mudeyes" and as such are prized by anglers as bait for trout and redfin (English perch).

Judging by the number of dragonflies seen during summer, anglers could expect a good season when the eggs laid by last summer's batch of dragonflies eventually hatched.

Dragonflies have two sets of wings, one behind the other. They cannot lift their wings to the vertical position like butterflies, and when they are at rest their wings are laid flat. This arrangement seems to make them extremely maneuverable when in flight, especially when travelling in the horizontal plane.

Next time you see a dragonfly flying, observe how it is able to change direction almost at will.

Reference:

The Australian wildlife year. Readers Digest, Sydney, 1989.

Ray Baverstock
13 Helena Street,
Highton, 3216

Local Freshwater Fish Species: Part 1

by Stuart Anderson

The following information was recorded during the period of 7/11/90 to 15/1/91, when I fished a length of the Moorabool River at Batesford, Victoria.

My aim was to determine which freshwater fish species lived in a stretch of water that varied from shallow fast flowing water to a deep slow moving pool.

Results of the fish captured were caught with a variety of fishing gear, rod and reel, drop net and bait nets. On each occasion the river was a little high but fairly clear.

Common Name

Scientific Name

NATIVE SPECIES

Blackfish

Gadopsis marmoratus

Eel, Short-Finned

Anguilla australis

Galaxias, Common

Galaxias maculatus

Tupong

Pseudaphritis urvilli

INTRODUCED SPECIES

Trout, Brown

Salmo trutta

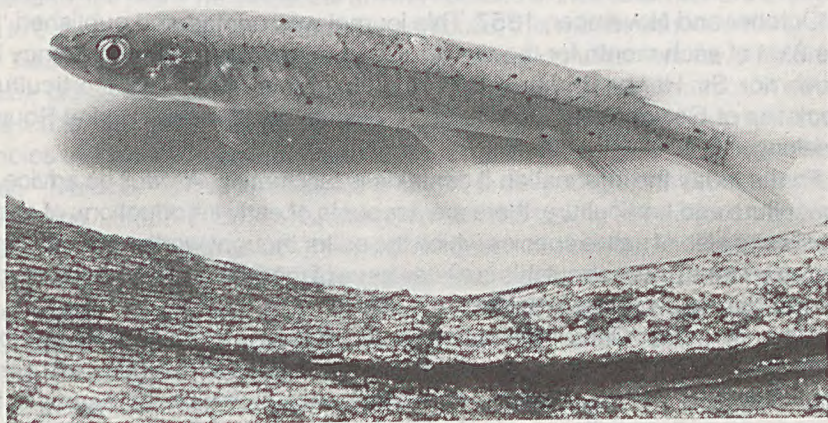
Redfin

Perca fluviatilis

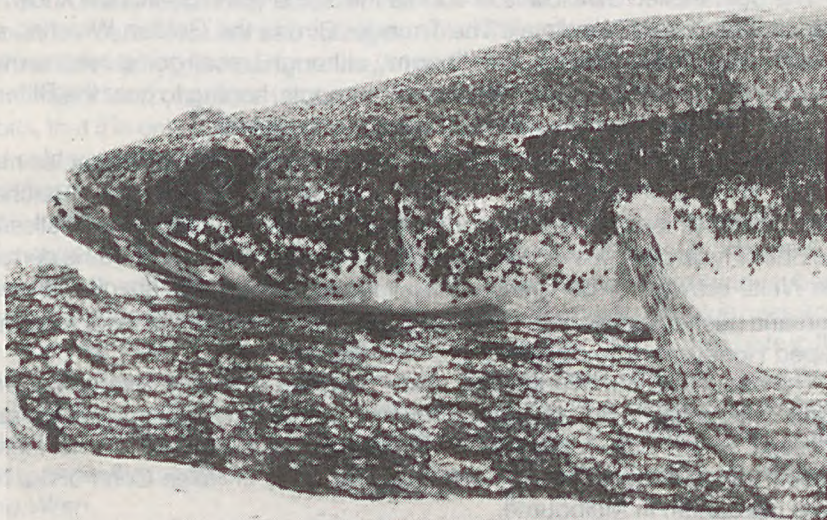
Three Blackfish, Two Eels and a Tupong were caught in the deeper section and one Redfin, a Trout and two Galaxias were caught close to the fast-flowing water.

Freshwater Crays and Tench (*Tinca Tinca*) were caught a short way upstream so I expect them to be in the same area. One Platypus, Tortoise and Water Rats have also been observed in the study area. Fish were caught on three evenings for a total of six hours.

Stuart Anderson
83 Corinella Street
North Geelong 325



Common Galaxias. Photo Trevor Pescott



Tupong. Photo Trevor Pescott

Gleanings by the Way

Editor's Note:

This article is reprinted from the Victorian Agricultural & Horticultural Gazette of October and November, 1857. This journal was printed and published "on the 21st of each month for the distinguished patronage of His Excellency the Governor Sir Henry Barkly K.C.B. and the Agricultural and Horticultural Societies of Geelong and Melbourne" by Heath and Cordell, Market Square, Geelong.

For us today the information it contains is fascinating. As well as advice on agriculture and horticulture, there are accounts of early introductions of exotic plants and also of native species which the editor thought worthy of inclusion in home gardens (more about this is a later issue of the Geelong Naturalist), and of the natural history of the colony.

Although these "Gleanings", whose author is not given, but which were probably by Samuel Hannaford who edited the *Gazette*, were written more than 130 years ago, the observations are still relevant. Compare, for example, the comments on dragonflies and butterflies (Lepidoptera) with those of Ray Baverstock elsewhere in this issue.

Emu Wrens are still found in the Geelong district, at Grasstree Park and in the heathlands of the eastern Otways, but they are not common.

The Spine-tailed Swallow is of course the Spine-tailed Swift, now known as the White-throated Needletail. The Thunder Bird is the Golden Whistler, and yes, the Australasian Bittern does "boom", although I recall going out one evening during one of the Club's Princetown campouts, hoping to hear the Bittern's famous call and returning with my curiosity unsatisfied.

I have had some problems identifying some of the other bird species mentioned. The Black Fan-tailed Flycatcher may be the Grey Fantail - Belcher's index reference for Black Fantail leads one to this species - or is it the Restless, or the Satin Flycatcher, or even Willie Wagtail? The Long-tailed Malurus is perhaps the White-browed Scrub-wren, and it is interesting that both species favoured *Bursaria* bushes for nesting. The Blackcap is an alternative name for the White-naped Honeyeater, "more often seen than heard".

The beautiful plant bearing deep rose-coloured flowers is *Tetralathea ciliata* (Pink Bells, or Black-eyed Susan). *Grevillea Latrobei* later became known as *G. ericifolia* and is now known as *G. lanigera*. I have been unable to identify *Melichrus glaucifolius*, even with the helpful efforts of Helen Cohn of the National Herbarium in Melbourne.

How much more convenient it would have been if I could have visited a Museum in Geelong and consulted local type specimens and references.

I

The more our investigations in the various branches of Natural History are extended, the more inexhaustible are the sources of interest which are presented to our view. To the Ornithologist in particular, this month is most inviting - for our Native Birds are laying their Eggs - a subject on which we have much to learn, - Gould's beautiful work being sadly deficient in such information. It would be a matter of interest to note with accuracy, how far the habits of our numerous species of Cuckoo, bear out those of the English bird. The little Blue-crested Wren - *Malurus* - is said to act as foster-parent to the young of the Bronze Cuckoo - *Chalcites lucidus*, and Mr. Blandowski mentions having seen it fed by several smaller birds, of a species which he had not been able to procure. The Black fan-tailed Fly-catcher we noticed a few days since, on the fence of the Botanical Gardens at Geelong; and it has, in former years, built in the Melbourne Gardens in October: where now, as in almost every bush of Box - *Bursaria spinosa* - (the tree resembling the Privet) - the Long-Tailed, as well as the Blue, *Malurus*, have constructed their nests of dry grasses;- an untidy structure, judging from the exterior, but snug enough inside, being lined with feathers.

In walking by the banks of some of the lagoons so common in the Colony, densely covered with rushes, with an undergrowth of *Rhagodia*, and *Triglochlin*, and the small grass peculiar to such situations, the *Sporobolus*, a chirp similar to that of a Grasshopper will often be heard.- Not so indeed, - it is an especial favourite of ours who utters so strange a note. We once shot one; it was a matter of sheer necessity; our hearts mourn yet for the deed. The little fellow, somewhat like the Blackcap, is more frequently heard than seen, and is so retiring in its habits, that it is only discovered by careful watching, flitting through the rushes, and seldom emerging from the concealment they afford him but occasionally clinging most gracefully to the flowering heads of those plants, on which probably it obtains its food. Its wings are remarkably short, and ill adapted for flight; but it appears to move from place to place with marvellous rapidity. The beak is nearly black, with strong bristles at its base; crown of head ferruginous; back and wings of dark olive with black markings. A streak of very pale blue rises from the base of the bill, extending over the eye on each side. Throat, pale blue in the male, but rufous in the female. The tail, which is three inches in length, - nearly as long again as the whole body - consists of 6 feathers, with slender black shafts webbed on each side with minute hairy filaments at equal distances; and so like are these feathers to those of the *Emu* that our friend is commonly known as the *Emu Wren*.

The nest is of grass, lined with feathers - a perfect ball in fact - concealed in tufts at the trunks of trees.

The *Acacia* scrub now, in many places, is rendered almost impassable by dense wreaths of blue flowers, the stems of which are thickly twined together, - it is the *Comesperma volubilis*, not unlike the little English Milkwort - *Polygala*; and indeed, it belongs to the Natural order - *Polygaleae*. The native heath - *Epacris impressa*, is now in full bloom; - we have a vase full before us as we write, its gorgeous crimson flowers affording a beautiful contrast to the snow-white, delicately fringed corollas of the Native Currant - *Lencopogon virgatus*, which is found near the sea within a few miles of Geelong, Brighton and Lady Bay. Some too, in their wanderings, may stumble over a plant about a foot high; the stem, branching, with ovate acute leaves, at distances of about an inch, three in number, and bearing deep rose-coloured flowers, with dark purple stamens, short drooping pedicels and inverted calyx, with glandular hairs. This plant, met with by Sir Thomas Mitchell, on the banks of a little stream near the Glenelg, and described by Lindley, in vol. 2 p. 206 of the "Australian Expeditions," is mentioned as "a charming species", and "perhaps the most beautiful plant we met with during the expedition." It is figured well in Hooker's "Icones plantarum" vol. 3, tab. 268 from specimens found near the mouth of the Tamar, by Ronald Gunn Esq. Another species, equally pretty, but with smaller leaves, and covered with hairs, we have just received from the neighbourhood of Beechworth, *T. pilosa*, with several other plants in flower - *Hovea linearis*, *Grevillea Latrobei*, *Melichrus glaucifolius* &c. &c.

We trust our Entomological friends took advantage of the swarms of beautiful Dragonflies and *Lepidoptera*, which made their appearance soon after the late thunderstorms. Now is the time to commence operations, and to peer about amongst the wild flowers, the edges of lagoons, garden palings, and such places, in search of *Coleoptera* - some so small as to be only recognised by the naked eye with difficulty.

The habits and nesting of the Reed Warbler can now be noticed in the lagoon at the Melbourne Gardens, where also the *Gallinules* will about this time be rearing their young broods. Has the Swamp Hawk, or Allied Harrier ever been noticed there by any of our Ornithological observers? It is, we believe, common about all the lagoons in Victoria. We have recently sustained a severe loss by the death of one which we had kept for many years. He was brought to us when very young; and when strong enough, a small steel chain, with a leather noose to prevent it rubbing, was put round his leg, a box given him for shelter by night, and a perch for his use by day. Raw meat was his daily food, and as he noticed our approach, he would alight, and utter a shrill scream. On receiving it, it was invariably carried to the most secluded spot he could find, and there concealing it with outspread wings, demolished it at leisure. Although accustoming him to our presence he was to the last "the old man still utterly untameable, although cats and dogs not only were allowed to approach with impunity, but even to

share his food. For many months he had no water, but during the summer season he delighted to plunge from his perch into a bath set for him immediately after feeding, dipping his bill quickly in the water, and then rubbing it sharply against the sides of the vessel, uttering a shrill cry of pleasure, but drink did he never.

II

The early riser now is amply repaid, (although Christopher North has written so eloquently against "early rising") by the freshness of the cool morning breeze, — the "profuse strains" of the Lark, as he flutters aloft from the long grass; and the sweet full note of the Swallow, than which we have no better songster in the Colony, skimming closely by almost touching the ground in search of insects. The purple Loosestrife, (*Lythrum Salicaria*) common occasionally by the river's banks, will set all lovers of the "gentle craft" longing for the streams, where of yore they captured the speckled Trout at sunrise, or enticed the wary Salmon with gaudy flies of their own contriving. We never remember taking a walk in any part of the world where we happened to be located — no matter whether by the seashore — the brens or bogs of Ireland — the shady hedgerows of Devon — the bleak Yorkshire hills, or the dense scrub and dreary plains of Australia, without finding some new feature to interest us. Our Geelong readers have only to pay a visit to the beautiful paddocks near the Barwon to obtain hosts of wild flowers, of which any description from our pen would be feeble indeed. The grass, blue as heaven, with a small *Lobelia* elegantly-trailing on the ground, whilst more ambitiously the white flowers of the *Burchardia umbellata*, and the pink corollas of the Jack-in-the-Box — *Stylidium* — hold up their heads on long, tall, almost naked stems. Then there is the gloriously pale blue *Brunonia Australis*, its small flowers clustered together in a dense head, with soft, woolly, or rather silky root leaves; and the waxy white *Pimelea*, specimens two feet high of the *Drosera*, with peltate leaves. The rugged Quarry banks too are ornamented by the white, long, tubular flowers of the sweet-scented Tobacco, (*Nicotiana suaveolens*); and here and there a small bushy plant with purple daisy-like flowers - *Eurybiopsis Hookeri*.

Some of our readers we have noticed examining on the beach masses of tubes clustered together on the rocks, and occasionally parasitic on shells of all descriptions, and we are merely fulfilling a promise to say a word or two here on the nature of the inhabitants of these same. They are called *Serpulae* — from *Serpa*, to creep, — and belong to the class *Annelidae*, the types of which are the Earthworm and Leech. As they retire into their *shells* on very slight alarm, it is difficult to notice their formation; but place the shell or mass of tubes, as the case may be, into a bottle of spirits, or Goadby's solution, and in a very short time you

will notice two scarlet fan-shaped appendages protruded, exhibiting a spectacle of great beauty, which expand and float in the water, and by which they respire. Another little animal nearly allied, forms for itself a tapering tube of sand and shells, cemented together by a secretion which exudes from the surface of its body and hardens quickly. This, too, is very abundant all along the coast and is called a *Terebella*, from the Latin *Terebra*, an auger. The animals in both cases may be withdrawn from their tubes without injury, there being no muscular connection between the worm and its habitation.

Turning from the seaside, we notice with much pleasure that something is at least being done to render the Botanical Gardens a pleasant place of resort for our townsfolk. A very pretty lodge has been erected at the western gate - walks laid out, and beds planted. The pathways, however, on which the beauty of a Garden so much depends, are, to our taste, too stiff and formal, with too much abruptness in the curves. We would suggest that the east gate near the Powder Magazine, be opened at least on sundays, when so many frequent the Gardens; — the trouble of opening it at noon, and closing at sunset, being trifling surely compared with the advantage the visitors would derive from it.

The Spine-tailed Swallow will probably be noticed this month, flying high in flocks, and may be known by the rapidity of its flight and great size; the male bird being 18 inches in length. The plumage is generally a greyish brown, with purple and green reflections on the neck; chin and throat white. The wings extend 3 inches beyond the tail, which consists of ten feathers; the shafts of each projecting beyond the web, forming a series of spines about an eighth of an inch in length — hence its popular name, occasionally varied to "*Pin or Needle-tailed Swallow*" A specimen was shot a few years since in Britain, and taken its place in some works on "*British Birds*". We have no doubt, whatever, of its capability of performing so long a journey, for, in addition to the length of its wings, and the rapidity which it flies, Mr. Gould remarks that "the keel or breastbone is more than ordinarily deep, and the pectoral muscles more developed than in any other bird of its weight". If so disposed, it may be here hawking for flies one minute, and in half an hour, be in Van Diemen's Land.

Flitting about in the Tea tree scrub in search of insects, the Black-crowned Thrush or Thunder Bird (*Pachycephala gutturalis*,) is a pleasing object of note. His plumage is greenish yellow on the back; bill and crown of head black, with streak of that color running down each side of the neck, and a broad band of yellow at the nape. The throat is white, with a band of black below. Length, about 7 inches. Expanse of wing, 8 inches. The note of this interesting bird is a loud single one, repeated quickly several times, and is said to resemble the crack of a whip, that of the female being softer and more plaintive. It lays four eggs, (rarely 3) 10 lines long, with a buff ground and reddish brown spots.

The Bittern is a bird of whose habits we know but little, though doubtless they

resemble those of the "English Bog Bumper" or "Mire Drum", as it is called in various localities. It frequents the marshes about the Merri River at Lady Bay, and is probably common in similar situations throughout the Colony; its peculiarly formed feet allowing it to wander where aught else scarcely dares to tread. A very beautiful specimen was brought to us in 1856, alive; but his plumage was so perfect, his eye so brilliant, that he obtained his liberty, instead of ornamenting our case. He had all the courage of the "Mire Drum", would crouch down on any one approaching, and with wings extended, and crest feathers raised, it required no small amount of courage to face his formidable bill.

Our readers will remember how in England,

"At evening, o'er the swampy plain;

The Bittern's boom came far."

Does our bird boom will any one inform us?

Now, with a sweeping net, myriads of small Moths may be taken in the long grass; and on the trunks of trees, some splendid specimens may be observed, and with a little caution easily captured.

Near the Chinese fish-curing establishment towards Limeburners' Point, a number of small fish are frequently lying, about four inches long, with the head and anterior extremities rather large, and tapering to the tail; the back beautifully mottled with very dark shining brown; sides and belly white, with rough spinous processes. These fish belong to the genus *Tetradon*, (Linn), and possess the power of inflating themselves. Instead of the true teeth as in other fishes, their jaws are divided in the middle, and present the appearance of four ivory teeth - two above and two below. The dorsal fin-rays deeply inserted. This is a poisonous species evidently. Will it account in any way for the great number of dead dogs so continually lying along the beach?

We entreat our friends to explore for themselves the boundless limits of creation, and we are always ready to lend a helping hand where any difficulties present themselves in the identification of specimens, &c., at the same time we shall be glad of any observations with which they may favour us to make these rough sketches more valuable.

*We too would be glad of any observations with which you may favour us.
Contributions to the Geelong Naturalist are always needed. - Ed.*

The Wild Flowers of the Month October

Geraniaceae

Erodium moschatum - Musky Stork's bill. In waste places about Geelong and Melbourne. Flowers pink; beautifully streaked.

Lineae

Linum marginale - Native Flax. Banks of Yarra and Hopkins Rivers. Flowers blue, with light pencillings.

Stackhousiaceae

Stackhousia monogyna - Yellow flowered Stackhousia. Grassy situations near Geelong, Lady Bay, Melbourne &c.

Portulacaceae

Claytonia Australasica.¹ - In most places near Geelong, Melbourne. Delicate white flowers.

Leguminosae

*Acacia mollissima*² - Soft leaved Wattle.

Rubiaceae

Galium Australe - Ladies' Bed-straw. Grassy places; common.

Compositae

*Gnaphalium luteo-album*³ - Cudweeds. Common

*Gnaphalium indutum*⁴ - Cudweeds. Common.

Campanulaceae

*Campanula gracilis*⁵ - Blue Harebell. Common everywhere.

Labiatae

Ajuga Australis - Bugle Flower

Gentianeae

*Sebaea albidiflora*⁶ - White flowered Sebaea. Brighton and Lady Bay.

*Sebaea ovata*⁷ - Yellow flowered Sebaea. Common everywhere.

Liliaceae

Thysanotus Patersonii - Twining round plants about Brighton. Flowers blue.

Reprinted from the Victorian Agricultural and Horticultural Gazette, September 1857.

1. *Monita australasica*. White Purslane.

2. *Acacia mearmsii*. Late Black Wattle.

3. Jersey Cudweed.

4. Tiny Cudweed.

5. *Wahlenbergia gracilis*. Annual Bluebell

6. White Centaury

7. Yellow Centaury

8. Twining Fringe-Lily

I wish to thank Helen Cohn, Librarian at the National Herbarium for her help in identifying the plants listed here and in the previous article.

Valda Dedman

Farewell to a Friend

by Ray Baverstock

It stood there for more than thirty years silhouetted against the eastern skyline. It was a magnificent gum tree growing in the back yard of the house four doors down the street from our home.

I am not sure what species it was, but it was a favourite of the birds which perched in its branches, and I have lost count of the number of times I have trained my binoculars on the tree in order to identify a bird resting there.

When we moved in to this street it was quite a big tree and as it grew taller more and more birds used it as a vantage point.

Many a time I have seen an Australian Hobby perched there, and Sulphur-crested Cockatoos, Pied Currawongs, Magpies, Galahs and Gang Gangs also used it.

The only time an Olive-backed Oriole visited our area it rested in the tree for more than ten minutes or so before continuing on its eastern journey.

As far as I know no birds ever nested in it. The foliage was never dense and a nest would have been too vulnerable to predators.

One warm day in March 1991 the tree was almost covered in birds. I counted at least 40 Galahs, 3 Magpies, 10 Gang Gangs and more than 15 Sulphur-crested Cockatoos all there at the same time. As you can imagine the noise was deafening. Later a pair of Australian Hobbys with a juvenile flew in.

For some months it was obvious that the tree was in trouble. No new foliage had appeared for a time and what was left became sparser. Finally on the 8th April the noise of the chain-saw was heard in the land and that great leveller reduced a tree, which had grown for more than thirty years, to firewood in less than a day.

Since its demise the number of larger birds observed has declined. This is particularly so in the case of the Pied Currawongs. They are often heard in the distance but the flocks of thirty or more seen in other years have not appeared at home, even though one or two fairly tall trees are still left in the area. It is obvious that the loss of one tree can greatly affect bird life.

Although this tree was a favourite one must be realistic and acknowledge that very big trees and small gardens are not a good combination. Several other large trees in the vicinity have been cut down when they have become too big and sometimes dangerous. I am sure that we need to be more thoughtful in our selection of trees for the home garden.

Ray Baverstock
13 Helena Street,
Highton, 3216

Non-marine Mollusc from Wyperfield N.P.

by Dave King

On a visit to Wyperfield National Park in August, 1990, and whilst investigating for fauna under fallen logs in the vicinity of Bullock Head Swamp a small mollusc was found. Molluscs of any kind are not abundant in this semi-arid location; therefore are, of more than casual interest.

Observed under magnification it was seen as one of the Charopidae family. According to the literature this is a large family of small to medium size snail centered on the Australasian region (Smith & Kershaw 1979). The subject specimen was identified as *Elsothera murrayana*, which places it in the sub-family Charopinae, the other of the two sub-families being Phenacohelicinae. The Charopinae are small shells with tight coils and distinct sculpturing on the postconch section of the shell. In most cases the spire is depressed. By contrast the Pheracohelicinae are longer and not so tightly coiled, and may have a more pronounced spire.

The specimen had four whorls and its size is four millimetres, which suggests it is sub-adult. Sculpturing consists of radial striations having finer interstriations on the protoconch section, the protoconch section being smooth. Colour is a light horn, without any variation or patterning. The spire is depressed, the umbellicus of medium width and a wide lunate aperture in the plane of shell.

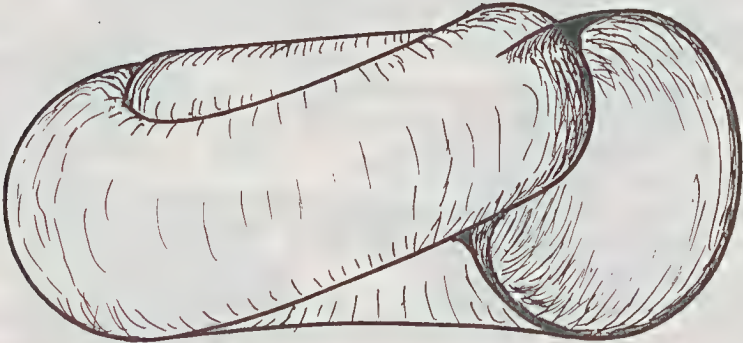
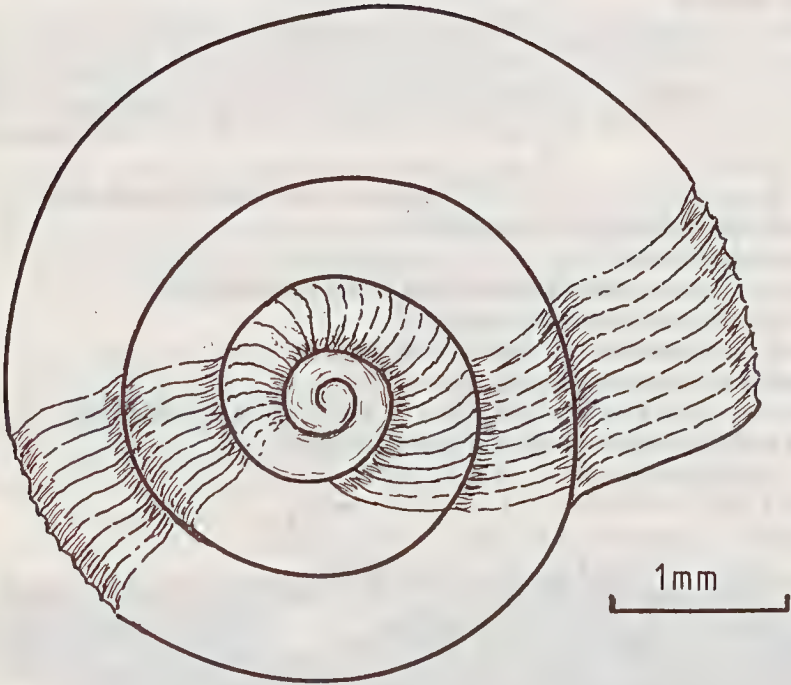
Range of this mollusc, according to Smith & Kershaw 1979, is western Victoria and eastern central South Australia. The reason for this species to be found in Wyperfield National park is probably due to the flood waters of the Wimmera River system on rare occasions reaching this far by way of Outlet Creek, the dry bed of this creek being adjacent to the point where *E. murrayana* was discovered.

Acknowledgements:

I am grateful to Ms. S. Boyd of the Museum of Victoria for confirmation of the subject molluscs identity.

References:

1979, Smith, B.J. & Kershaw, R.C. Field Guide to the Non-Marine Molluscs S.E. Australia, Australian National University Press, Canberra.



Elsothera murrayana

For Juniors

by Valda Dedman

Adopt-a-Bird

No, I'm not suggesting you rear an orphan fledgling, but that you "adopt" a species as your very own and find out all you can about it, mainly from your own observations. Preferably, choose one you see often, and start asking yourself questions about it. You'll discover there is much more to birdwatching than you ever dreamed.

To help you get started, use the following list. You'll find it is only a beginning, and you'll want to add your own questions.

1. How big is the bird?
2. What is its main colour, and the colour of its various parts?
3. Are there any distinguishing markings?
4. Are the sexes the same in colour? In size?
5. Does the plumage vary during the year?
6. What colour are the juveniles? When do they achieve full adult plumage?
7. What is its flight pattern? Does it glide, flap, soar?
8. How does it hold its wings when it flies?
9. Does it gather in flocks at any time of the year?
10. Are flocks composed of all ages, or only juveniles.
11. Do you see it in small groups, singly, pairs?
12. In which months does it nest?
13. What sort of nest does it build? Where?
14. Do both sexes share in nest building? In incubating the eggs?
15. Does it have any special courting behaviour?
16. Does it mate for life?
17. What does it feed on?
18. How does it obtain its food? On the ground? On the wing? In the water?
19. Does it like to bathe? Take dust baths?
20. Does it come out in the rain? Heavy rain?
21. Does it often come to the ground?
22. Does it walk or hop? Scurry?
23. Does it move quickly on the ground?
24. Does it stay near cover, and retreat often?
25. How fast does it fly?
26. Does it migrate? Where to?
27. How many different calls does it have? What do they signify?
28. Does it call at night?
29. Does it have a territory? All year?
30. What does it feed its young on? How often? Does the food change?

31. How many eggs does it lay? What do the eggs look like?
32. Does it perch on branches?
33. Where does it roost? Alone, or with a group?
34. Is it frequently on the move, or does it stay still for long periods?
35. What sort of feet does it have? How many toes?
36. Does it use its feet to hold its food?
37. What shape is its bill? Does it use it to extract food? From plants? From the sea?
38. Is the species common in the Geelong region?
39. Has it always been observed here?
40. How do you know at a glance that it is "your" bird? What is its "Jizz"?

Keep a notebook (and pencil) in a handy place, near the window for instance, so that you can jot down your answers, and other observations as you find them.

I have chosen the Red Wattlebird as my adopted species. Although I've been seeing the birds for many years I still have a great number of unanswered questions.

So "adopt" a Magpie, or a Silver Gull, or a New Holland Honeyeater, A Willie Wagtail or even a Sparrow and sharpen up your birdwatching skills.

Good luck and have fun!



Red Wattlebird. Photo Trevor Pescott

Aboriginal Plant Foods and Remnant Species

G.F.N.C. Excursion: 18th August, 1991

Laurie Gilmour, a native plants enthusiast, was the guide for our excursion which commenced at the Lara Railway Station. Travelling by car convoy on a fine day which heralded the coming Spring, we made our first stop at a wide roadside reserve beside the Old Melbourne Road on the way to Little River. We observed a very low-growing, almost pure stand of pink-tinged Kangaroo Grass (*Themeda triandra*) which, due to Laurie drawing the attention of the Shire of Corio to its presence, has been used by them for seed collection and dispersal. At a meeting earlier in the year Louis Lane, a Club member and speaker, told us how the local aboriginals pounded certain native grass seeds between stones and, when mixed with water, ate it as a kind of "porridge", or baked it.

In Rothwell Cemetery Laurie located a herb, Feather-heads, (*Ptilotus macrocephalus*) which has a tuberous root extending into the soil for a metre or more. He felt sure that it, and the roots of orchids, would have been eaten by the Wathaurong tribe before European occupation of the area. Another place we looked for remnant species was under Sugar Gum plantations where exotics find it difficult to compete with indigenous plants. Roots of various plants of the Liliaceae family provided the aboriginals with starch in their diet. Other food sources, adding variety, were: Ruby Saltbush and Inland Pigface and from wet areas Nardoo and Cumbungi.

Common Rice-flower and Clustered Everlasting were blooming beside the Geelong-Melbourne railway line, providing us with a mental picture of the original landscape with colourful wildflowers proliferating across the rock-strewn basalt plains. At one location in a railway reserve it was sad to see a solitary, crimson, *Grevillea* Lara, other nearby specimens having been bulldozed when the line was relocated.

On an optimistic note we ended our day's instruction with a walk along Hovell's Creek, Lara, appreciating some most unusual native species planted by Kevin Hoffman.

Fay Wray

Laurie Gilmour provided the following list of plants seen in the area covered throughout the day:

Aboriginal Plant Foods

<i>Bulbine bulbosa</i>	Bulbine Lily
<i>Burchardia umbellata</i>	Milkmaids
<i>Caesia calliantha</i>	Blue grass lily
<i>Carpobrotus modestus</i>	Pigface
<i>Allocasuarina luehmanii</i>	Bullock (lerps)
<i>Convolvulus erubescens</i>	Pink Bindweed
<i>Dianella revoluta</i>	Black Anther Flax Lily
<i>Dichopogon strictus</i>	Nodding Chocolate Lily
<i>Einadia hastata</i>	Saloop
<i>Geranium solanderi</i>	Crane's Bill
<i>Maireana drummondii</i>	Nardoo
<i>Microseris scapigera</i>	Yam Daisy
<i>Pelargonium rodneyanum</i>	Magenta Stork's Bill
<i>Podolepis jaceoides</i>	Showy Podolepis
<i>Ptilotus macrocephalus</i>	Feather-Heads
<i>Ptilotus spathulatus</i>	Pussy-tails

Other Species

<i>Acacia paradoxa</i>	Hedge Wattle
<i>Acacia pycnantha</i>	Golden Wattle
<i>Acaena anserinifolia</i>	Bidgee Widgee
<i>Asperula conferta</i>	Common Woodruff
<i>Calocephalus citreus</i>	Lemon Beauty Buttons
<i>Cheilanthes austrotenuifolia</i>	Rock Fern
<i>Clematis aristata</i>	Small-leaved Clematis
<i>Craspedia chrysantha</i>	Golden Billy Buttons
<i>Dianella laevis</i>	Pale Flax Lily
<i>Drosera whittakeri</i>	Scented Sundew
<i>Enchylaena tomentosa</i>	Ruby Saltbush
<i>Helichrysum semipapposum</i>	Clustered Everlasting
<i>Lepidium sp.</i>	Pepper Cress
<i>Minuria leptophylla</i>	Minnie Daisy
<i>Pimelia humilis</i>	Common Rice Flower
<i>Poa labillardieri</i>	Tussock Grass
<i>Stipa sp.</i>	Spear Grass

The Ghost of a Hearth Shovel

By L. Lane

While the Friends of Inverleigh Common were on their knees photographing a plentiful variety of orchids, flaxes, mosses, sundews, etc., which were flourishing among the grasses under the Red-gum Forest, one visitor kept her attention mainly on the tree-trunks looking for any evidence of aboriginal-occupation in the present Nature Reserve.

The TOLLOORA-Clan of the WATHAURUNG-Tribe lived north of the Barwon between the Yarrowee/Leigh and the Moorabool Rivers. Their northern neighbours were the KUREET-Clan who owned the territory nearer the Great Divide while, directly south of the Barwon, lived the WUDTHAURUNG-Clan; further south again were the GERARLTURE-Clan, based on Lake Modewarre.

Inspecting the trunk of a venerable giant of a tree, we observed an oval scar where bark had been removed to make a WANGAT, the fire-shovel used by aboriginal-chefs at the hearth to toss hot sand, ashes and embers over food being baked and, later to draw the cooked food from the coals.

It was an ancient scar for the cortex of the tree has regrown over part of the exposed cambium layer from which the domestic utensil had been prised. The regular, oval scar measured 40 x 20 centimetres. The original plaque probably would have been a little bigger (say, 47x27 centimetres) although it would have been pared to refine the margins.

The leading edge would have first been indurated by being heated in the course of its daily use but would have subsequently become charred and reduced by wear.

The lowest margin of the WANGAT-Scar was 1.6 Metres from the ground.

Around the immense trunk of the tree (which has the circumference of 5.4 Metres at a height of one (1) Metre from ground level) is a circle of sward thirty (30) Metres across upon which no other tree is growing.

Was this "clearing" for some human activity OR purpose?

Probably not. The "umbrella" provided by the far-flung branches of the camaldulensis would have shaded the ground underneath. This would have prevented the growth of tall woody plants beneath the canopy.

The recent fire which cleared away all undergrowth left this mysterious, green arena where the herbs and grasses are now reappearing from bulb and rootstock after our wet winter/spring weather (1991).

On another facet of the trunk, is a scar which *may have been* a shield-strip. The formation was marred and obscured when a huge limb on the northern side of the tree broke away many, many years ago, for the branch has been reduced by fire and decay to a mere hump of charcoal and grass.

Although this particular large tree is surrounded by much smaller trees, examples of a comparable size and shape are to be seen on farmland paddocks to the west of Common Road opposite Redgum Track. They have a similar central, upright trunk topped by an extensive canopy. On viewing them, one is moved to wonder just how old they might be.

L. Lane
Barkly Street
East Geelong

Feeding Behaviour of an Immature Grey Butcherbird

by Ray Baverstock

Grey Butcherbirds are regular visitors to our part of Highton, having become more common since the large trees on the eastern boundary of the Highton cemetery were cut down some years ago. I believe this action caused the birds to disperse to other areas and they are now seen or heard at home (Helena Street) almost every day.

Butcherbirds are noted for their habit of wedging their prey into forks of trees or impaling it on broken branches. I have not witnessed this, but recently observed an immature Grey Butcherbird, which was holding a very large worm in its beak, fly into an Agonis tree in our neighbour's back yard. Instead of swallowing such a soft-bodied creature in a few gulps, as most other species would have done, the butcherbird laid the worm carefully over a thin branch and then began to break off sections of worm and swallow them, taking four or five bites to finish its meal.

There is no doubt that their method of eating prey is firmly imprinted in their genes.

Ray Baverstock
13 Helena Street
Highton, 3216



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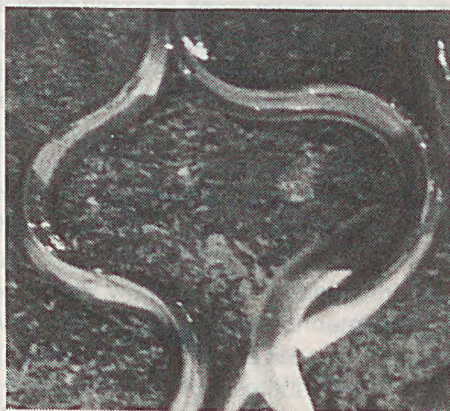
For further details contact

Alan Robertson

Gipsy Point Lodge

Gipsy Point, Victoria, 3891, Australia

Telephone: (051) 58 8205



Mystery photograph. By Trevor Pescott

SYLLABUS 1991/92

OCTOBER 1991

- 1 General Meeting: "Evolution of Plants" - Les Barrow
- 8 Plant Group Meeting: "Plants at Grasstree Park" - Bill Gunn.
- 12 Plant Group Excursion: Grasstree Park.
Leader: Bill Gunn (Ph: 551818)
- 18/20 Campout. Bambra/Wensleydale. Leaders: Geoff and Lauris Mathison (Ph: 672379)
- 20 Excursion. Bambra/Wensleydale. Leaders: Geoff and Lauris Mathieson (Ph: 672379)
- 22 Bird Group Meeting: "Orange-Bellied Parrot Update" - John Starks.

NOVEMBER

- 5 General meeting: "Reptiles" - Mark Borse
- 9 Juniors Group. Rock Pools
Leader: Grant Baverstock (Ph: 817256)
- 9 Plant Group Excursion. Wensleydale.
Leader: Betty Moore (Ph: 887220)
- 12 Plant Group Meeting. "Bambra Bushland Flowers" - Geoff & Lauris Mathison
- 17 Excursion. Wombat State Forest. Leaders: Ron Rixon (Ph: 03-7494219 & Rohan Bugg (Ph: 03-7412257)
- 23 Plant Group Excursion. Barwon Downs.
Leader: John James
- 26 Bird Group Meeting. "Birds from our Cape York Trip" - Gordon McCarthy.

DECEMBER

- 3 General meeting. "Cape York Safari". Members night.
- 10 Plant Group Meeting. "Cape York Flora". Safari members.

JANUARY 1992

- 9 Thursday evening Excursion. Buckley Falls - Leader: Tony Woolford (Ph: 436340)
- 11 Juniors Group. Waders, Edward Point - Leader: Grant Baverstock (Ph: 817256)
- 25/27 Campout. Alpine. Leader: Graeme Tribe (Ph: 552302)
- 28 Bird Group Meeting. "Kimberley Birds" - Margaret Cameron.

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